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PATENT APPLICATION
IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Yoshiyuki HASHIMOTO, et al.

Docket No: Q85618

Appln. No.: 10/519,002

Group Art Unit: 2841

Confirmation No.: 7484

Examiner: Jeremy C. Norris

Filed: December 27, 2004

For: CIRCUIT BOARD UNIT AND METHOD OF CONNECTING BOARDS TO EACH OTHER

INFORMATION DISCLOSURE STATEMENT
UNDER 37 C.F.R. §§ 1.97 and 1.98

MAIL STOP AMENDMENT

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

In accordance with the duty of disclosure under 37 C.F.R. § 1.56, Applicant hereby notifies the U.S. Patent and Trademark Office of the documents which are listed on the attached PTO/SB/08 A & B (modified) form and/or listed herein and which the Examiner may deem material to patentability of the claims of the above-identified application.

1. United States Patent No. 5,627,730, issued May 6, 1997.
2. Japanese Patent Application Publication No. 61-199074, published December 12, 1986.
3. Japanese Patent Application Publication No. 10-93240, published April 10, 1998.

One copy of each of the listed documents is submitted herewith, except for the U.S. Patent.

The present Information Disclosure Statement is being filed after the later of three months from the application's filing date and the mailing date of the first Office Action on the

INFORMATION DISCLOSURE STATEMENT

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Attorney Docket: Q85618

merits, but before a Final Office Action, Notice of Allowance, or an action that otherwise closes prosecution in the application (whichever is earlier), and therefore Applicant is filing concurrently herewith a Statement Under 37 C.F.R. § 1.97(e). No fee under 37 C.F.R. § 1.17(p) is required.

In compliance with the concise explanation requirement under 37 C.F.R. § 1.98(a)(3) for foreign language documents, Applicant encloses here with a copy of a corresponding Chinese Office Action dated June 16, 2006, and an English translation (based on the Japanese translation of the Chinese Office Action) of the pertinent portions thereof which cites such documents and indicates the degree of relevance found by the foreign office.

The submission of the listed documents is not intended as an admission that any such document constitutes prior art against the claims of the present application. Applicant does not waive any right to take any action that would be appropriate to antedate or otherwise remove any listed document as a competent reference against the claims of the present application.

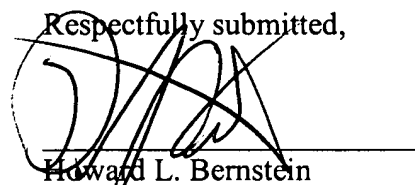
The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

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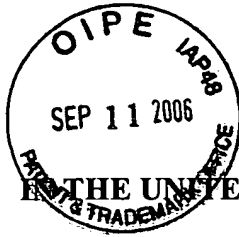
WASHINGTON OFFICE

23373

CUSTOMER NUMBER

Respectfully submitted,

Howard L. Bernstein
Registration No. 25,665

Date: September 11, 2006



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STATEMENT UNDER 37 C.F.R. § 1.97(e)

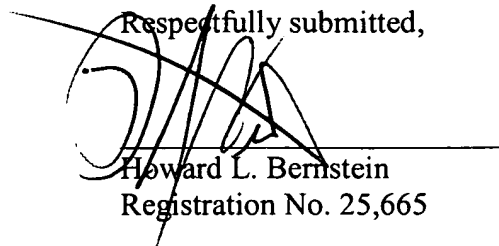
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

The undersigned hereby states, upon information and belief:

That each item of information contained in the Information Disclosure Statement filed concurrently herewith was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of said Information Disclosure Statement.

Respectfully submitted,



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Claim 1 claims protection for a circuit board device. However, Comparison Literature 1 (US5627730A) discloses a type of circuit board device, including the following characteristics (see column 2, lines 11 through 52 of the Specification, and Figures 1 and 2): a first board (caption 12) with a first electrode terminal group (caption 16) arranged in a matrix on the top layer; a second board (caption 10) with a second electrode terminal group (caption 14) arranged in a matrix on the top layer in a manner corresponding to said first electrode terminal group; an anisotropic conductive member (caption 26) arranged between said first board and second board; said first board, said anisotropic conductive member and said second board are tightly joined under pressure to electrically connect said first electrode terminal group and said second electrode terminal group to each other (Figure 2). Therefore, since Comparison Literature 1 discloses all the technical characteristics of Claim 1 and since Comparison Literature 1 and Claim 1 belong to the same technical field, solve the same technical problem and implement the same technical effect, Claim 1 does not conform to the stipulations regarding novelty of Article 22, Paragraph 2 of the Patent Law.

Claim 2 cites Claim 1, its additional technical characteristics being that it “additionally comprises a compression component that compresses said first board, said anisotropic conductive member and said second board to tightly join them to each other.” However, since the aforementioned characteristics have also been disclosed in Comparison Literature 1 (Figure 1, caption 28), if the cited Claim 1 lacks novelty, then Claim 2 also does not conform to the stipulations regarding novelty of Article 22, Paragraph 2 of the Patent Law.

Claim 3 cites Claim 2, its additional technical characteristics being that “said compression component consists of a first surface that contacts said first board, a second surface that contacts said second board, and a third surface that causes said first surface and second surface to be positioned parallel to each other.” Comparison Literature 2 (JH S61-199074U) discloses a type of wiring device including the aforementioned characteristics (Figure 4, caption 10). The function of the aforementioned characteristics in Comparison Literature 2 and in the present application is the same, in both cases bringing the two boards together tightly. Since aforementioned Comparison Literature 2 suggests applying the aforementioned characteristics to Comparison Literature 1, Claim 3 has no outstanding substantive distinguishing characteristics or remarkable inventive step, and does not conform to the stipulations regarding creativity of Article 22, Paragraph 3 of the Patent Law.

Claim 4 cites Claim 3, its additional technical characteristics being that “said compression component consists of a material having springiness.” However, the aforementioned characteristics have also been disclosed in Comparison Literature 2, and thus if the cited Claim 3 lacks creativity, then Claim 4 does not conform to the stipulations regarding creativity of Article 22, Paragraph 3 of the Patent Law.

Claim 7 cites any one of Claims 1 through 4 and adds limitations through additional technical characteristics. Comparison Literature 1 additionally discloses the following content: the exposed surface of the aforementioned electrode terminals forms a planar surface, and said electrode terminals contact said anisotropic conductive member via said exposed surface (Figures 1 and 2). Comparison Literature 3 (JP Unexamined Patent Application Publication H10-93240A) discloses a type of circuit board device in which a first board and a second board (captions 4 and 5) are connected via an anisotropic conductive member (caption 9). The following characteristics are disclosed therein (see column 7, line 38 through column 9, line 10 of the Specification and Figure 3): at least one via (captions 4c and 5c) is formed in communication with each electrode terminal forming the first and second electrode terminal groups, and at least one wire (captions 4d and 5b) is brought from said first and second electrode terminal groups through said vias and the inside layer or bottom layer of said first board. The function of said characteristics in Comparison Literature 3 and in the present invention is the same, in both cases connecting wiring inside or on the bottom of a circuit board through a passage to electrode terminals. Thus, since Comparison Literature 3 provides suggestions for applying the aforementioned characteristics to Comparison Literature 1 to resolve the technical problem thereof, Claim 7 has no outstanding substantive distinguishing characteristics or remarkable inventive step, and does not conform to the stipulations regarding creativity of Article 22, Paragraph 3 of the Patent Law.

Claim 8 cites any one of Claims 1 through 7, its additional technical characteristics involving a limitation of the conductive material of the anisotropic conductive members. However, using conductive granules of copper, silver or the like as the conductive material of anisotropic conductive members is a commonly employed technical means in field in question, so if the cited claims lack novelty or creativity, then Claim 8 does not conform to the stipulations regarding creativity of Article 22, Paragraph 3 of the Patent Law.

Claim 9 cites any one of Claims 1 through 8, its additional technical characteristics involving a limitation to the effect that the first and second boards are multilayer of two-sided flexible or rigid printed circuit boards. However, since the aforementioned circuit boards are of a type commonly used in the field in question, if the cited claims lack novelty or creativity, then Claim 9 does not conform to the stipulations regarding creativity of Article 22, Paragraph 3 of the Patent Law.

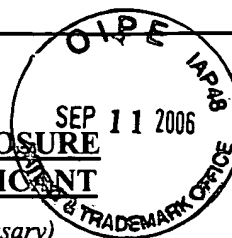
Claim 10 cites any one of Claims 1 through 9, its additional technical characteristics involving a limitation as to the adhesion layer formed on the end surfaces of the anisotropic conductive members. However, since forming an adhesion layer on anisotropic conductive members so as to make them easy to mount is a commonly used technical means, if the cited claims lack novelty or creativity, then Claim 10 does not conform to the stipulations regarding creativity of Article 22, Paragraph 3 of the Patent Law.

Claim 11 claims protection for a method of connecting boards. Comparison Literature 1 (US5627730A) discloses a method of connecting boards, including the following characteristics (see column 2, lines 11 through 52 of the Specification, and Figures 1 and 2): a first board (caption 12) with a first electrode terminal group (caption 16) arranged on the top layer and a second board (caption 10) with a second electrode terminal group (caption 14) arranged on the top layer in a manner corresponding to said first electrode terminal group are connected to each other; a first step in which an anisotropic conductive member (caption 26) is arranged between said first board and second board; a second step in which said first board, said second board and said anisotropic conductive member are compressed in the thickness direction to electrically connect said first electrode terminal group and said second electrode terminal group (Figure 2). Therefore, since comparison document 1 discloses all the technical characteristics of Claim 11 and since Comparison Literature 1 and Claim 11 belong to the same technical field, solve the same technical problem and implement the same technical effect, Claim 11 does not conform to the stipulations regarding novelty of Article 22, Paragraph 2 of the Patent Law.

Substitute for Form 1449 A & B/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(use as many sheets as necessary)



Complete if Known

Application Number	10/519,002
Confirmation Number	7484
Filing Date	December 27, 2004
First Named Inventor	Yoshiyuki HASHIMOTO
Art Unit	2841
Examiner Name	Jeremy C. Norris
Attorney Docket Number	Q85618

Sheet 1 of 1

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Document Number		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document
		Number	Kind Code ² (if known)		
		US 5,627,730	A	05-06-1997	Konig et al.
		US			
		US			
		US			
		US			
		US			
		US			
		US			
		US			

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document			Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Translation ⁶
		Country Code ³	Number ⁴	Kind Code ⁵ (if known)			
		JP	61-199074	U	12-12-1986		
		JP	10-93240	A	04-10-1998		

NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city, and/or country where published.	Translation ⁶

Examiner Signature

Date Considered

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Applicant's unique citation designation number (optional). ²See Kind Codes of USPTO Patent Documents at www.uspto.gov, MPEP 901.04 or follow the hyperlink from the title of the document to the intranet. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST. 3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶Applicant is to indicate here if English language Translation is attached.